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On page 1, lines 14 to 16, delete "The present application also incorporates by reference USSN __/___,___, for --Human Telomerase Catalytic Subunit" (attorney docket No.: 015389-002610US), filed concurrently on November 19, 1997-- .

On page 20, line 12, delete "the DNA" with --a DNA encoding a polypeptide-- .

On page 26, lines 13, 14 and 15, delete "Motif T of Figure 1, Motif 1 of Figure 1, Motif 2 of Figure 1, Motif A of Figure 1, Motif B' of Figure 1, Motif C of Figure 1, Motif D of Figure 1, and Motif E of Figure 1" and insert --Motif T of Figures 55 or 57, Motif 1 of Figures 55 or 57, Motif 2 of Figures 55 or 57, Motif A of Figures 55 or 57, Motif B' of Figures 55 or 57, Motif C of Figures 55 or 57, Motif D of Figures 55 or 57, and Motif E of Figures 55 or 57--.

On page 27, line 24, delete "(L/I)L(R/K)(L/V)XDD(F/Y)Lh(I/V)(T/S)" and insert --(L/I)(L/M)(R/K)(L/V)XDD(F/Y)Lh(I/V)(T/S) (SEQ ID NO:475)--.

On page 28, line 16, insert --(TTTTGGGG = SEQ ID NO:44; GGGGTTTT = SEQ ID NO:45)-- after "telomerase".

On page 28, line 20, insert --($G_4T_4G_4T_4$ = SEQ ID NO:61)-- after "exposure level".

On page 28, lines 28 and 29, insert --(individual peptides = SEQ ID NOS:152-222)-- after "(SEQ ID NOS:4-6)".

On page 29, lines 15 and 16, delete "(SEQ ID NOS:14-17, and 19-22)" and insert --(Dong (LINE) = SEQ ID NOS:231-234; a1 S.c. (group II) = SEQ ID NOS:235-239; HIV-RT = SEQ ID NOS:240-243; L8543.12 yeast = SEQ ID NOS:244-247; consensus Motif A = SEQ ID NO:248; consensus Motif B = SEQ ID NO:249; consensus Motif C = SEQ ID NO:250; consensus Motif D = SEQ ID NO:251; consensus Motif E = SEQ ID NO:252)--.

On page 29, line 25, delete "T,thermophila" and insert --*T. thermophila*--.

On page 30, line 12, delete "(SEQ ID NO:61)" and insert --(human)--.

On page 30, line 29, after "protein sequences." insert --Also shown in Figure 36 are the actual genomic sequences (SEQ ID NOS:270 and 273) and the peptides encoded therefrom (SEQ ID NOS:269 and 274), degenerate primers Poly 4 (SEQ ID NO:262) and Poly

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1 (SEQ ID NO:263), homologous regions of the M2 PCR product (SEQ ID NO:271), and its encoded peptide region (SEQ ID NO:272).--.

On page 31, line 9, delete "subunits" and replace with --subunit motifs from *S. pombe* tez1 (SEQ ID NOS:275-279), *S. cerevisiae* Est2 (SEQ ID NOS:280-284), and *E. aediculatus* p123 (SEQ ID NOS:285-289); and, consensus sequence regions (SEQ ID NOS:290 and 291)-- .

On page 31, line 10, delete "Figure 42 shows" and insert --Figures 42A and 42B show-- .

On page 31, line 10, after "three telomerase sequences" insert --, *S. pombe* tez1 (SEQ ID NO:69), *S. cerevisiae* Est2 (SEQ ID NO:55) and *E. aediculatus* p123 (SEQ ID NO:2). Conservative substitutions and identical amino acid residues are shaded in Figure 42A; identical amino acid residues are shaded in Figure 42B-- .

On page 31, line 23, delete "various sources" and replace with --*E. aediculatus* p123 (SEQ ID NOS:292-297), *S. pombe* tez1 (SEQ ID NOS:298-303), *S. cerevisiae* Est2 (SEQ ID NOS: 304-309), and human TCP1 (SEQ ID NOS:310-315), and insert various RT motifs and consensus sequences (SEQ ID NOS:290 and 291) indicated in the Figure-- .

On page 32, line 14, delete "Figure 56 shows" and insert --Figures 56A and 56B show-- .

On page 32, line 15, after "and insert hTRT." insert --Figure 56A shows alignment of mTRT protein (SEQ ID NO:413) and insert hTRT protein (SEQ ID NO:412). Consensus peptides are given in SEQ ID NOS:414-416. Figure 56B shows alignment of mTRT DNA (SEQ ID NO:419) and insert hTRT cDNA (SEQ ID NO:417). Consensus nucleotides are given in SEQ ID NO:418.-- .

On page 36, lines 10 and 11, delete "Figure 47" and insert --Figure 59--.

On page 43, line 3, after "X_4-F-X_3-D-X_4-Y-D-X_2" insert --(SEQ ID NO:144), P(K/E)(K/L)(Y/F)FhXhDh (SEQ ID NO:482)--.

On page 124, line 27, delete "T_m-5EC (5EC below the T_m of the probe)" and insert -- T_m -5°C (5°C below the T_m of the probe)--.

On page 124, line 28, delete "20EC to 25EC" and insert -- 20°C to 25°C --.

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On page 129, line 23, delete "4EC" and insert --4°C--.

On page 129, line 25, delete "EC" and insert --°C--.

On page 130, line 23, delete "4EC" and insert --4°C--.

On page 131, line 17, delete "4EC" and insert --4°C--.

On page 131, line 21, delete "30EC" and insert --30°C--.

On page 131, line 22, delete "4EC" and insert --4°C--.

On page 131, line 26, delete "mixture and insert WB at 4EC" and insert --mixture and insert WB at 4°C--.

On page 131, line 26, delete "15 minutes and insert WB at 4EC" and insert --15 minutes and insert WB at 4°C--.

On page 131, line 27, delete "30EC" and insert --30°C--.

On page 131, line 28, delete "25EC" and insert --25°C--.

On page 132, line 3, delete "25EC" and insert --25°C--.

On page 133, line 21, delete "25EC" and insert --25°C--.

On page 133, line 23, delete "45EC" and insert --45°C--.

On page 136, line 5, delete "45EC" and insert --45°C--.

On page 138, line 8, delete "4EC" and insert --4°C--.

On page 139, line 6, delete "80EC" and insert --80°C--.

On page 139, line 13, delete "25EC" and insert --25°C--.

On page 141, line 30, delete "nanoES" and insert -- Nano electrospray (ES)--.

On page 142, line 10, delete "95EC" and insert --95°C--.

On page 142, line 11, delete "94EC, 1 minute at 52EC, and 2 minutes at 72EC" and insert --94°C, 1 minute at 52°C, and 2 minutes at 72°C --.

On page 142, line 12, delete "72EC" and insert --72°C --.

On page 143, line 26, delete "The "La-domain" is indicated in bold-face type.".

On page 147, line 15, delete "95EC" and insert --95°C--.

On page 147, line 15, delete "94EC" and insert --94°C--.

On page 147, line 15, delete "53EC" and insert --53°C--.

On page 147, line 15, delete "72EC" and insert --72°C--.

On page 147, line 16, delete "72EC" and insert --72°C--.

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On page 148, line 29, delete "94EC" and insert --94°C--.

On page 148, line 29, delete "37EC" and insert --37°C--.

On page 148, line 30, delete "72EC" and insert --72°C--.

On page 149, line 3, delete "100EC" and insert --100°C--.

On page 149, line 9, delete "42EC" and insert --42°C--.

On page 149, line 28, delete "94EC to 50EC" and insert --94°C to 50°C --.

On page 149, line 29, delete "55EC" and insert --55°C--.

On page 152, line 1, delete "94EC, followed by 30 cycles of 94EC" and insert --94°C, followed by 30 cycles of 94°C --.

On page 152, line 2, delete "50EC for 45 seconds, and 72EC for 30 seconds, and 7 minutes at 72EC" and insert --50 °C for 45 seconds, and 72 °C for 30 seconds, and 7 minutes at 72 °C --.

On page 152, line 3, delete "4EC" and insert --4°C--.

On page 153, line 2, delete "94EC for 5 min, followed by 30 cycles of 94EC" and insert --94°C for 5 min, followed by 30 cycles of 94°C --.

On page 153, line 3, delete "50EC for 30 seconds, and 72EC for 3 min), followed by 7 minutes at 72EC" and insert --50 °C for 30 seconds, and 72 °C for 3 min), followed by 7 minutes at 72°C --.

On page 153, line 4, delete "4EC" and insert --4°C--.

On page 156, line 13, delete "Figure 1" and replace with --Figure 25--.

On page 185, line 17, delete "hTRT)" and insert --hTRT--.

On page 185, line 21, delete "(utilizing" and insert --utilizing--.

On page 191, line 5, delete "1.".

On page 193, line 3, delete "AmpR)" and insert --AmpR--.

On page 198, line 1, delete "hTR+45" and insert --hTR+445--.

IN THE CLAIMS:

Please amend the claims as follows.

In claim 2, line 8 (line 4 of the claim), delete "61,".

In claim 2, line 8 (line 4 of the claim), delete "68" and insert --69--.